



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,532	04/16/2004	Jesse R. Chattin	2057.017	2159
30448	7590	08/14/2007		
AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188			EXAMINER JOHNSON, VICKY A	
			ART UNIT 3682	PAPER NUMBER
			MAIL DATE 08/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/826,532

Applicant(s)

CHATTIN, JESSE R.

Examiner

Vicky A. Johnson

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 219.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, and 5-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 is indefinite because, it is unclear how to interpret the limitation "at least one spacer located between two sprockets". Applicant's drawings show in Figs 2 and 3 (non-circular sprocket) an unnumbered spacer, Figs 5-7 show a spacer (160), and Figs 8-11 (circular sprockets) show a spacer (160), but none show the ring part (180) and the boss part (170) between two sprockets as claimed. For this office action, the two sprockets will be on the boss part as shown in Figs 2 and 3.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, and 5-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Chattin (US 6,293,884).

Chattin discloses a sprocket, said sprocket comprising: a body (10) having a center, a perimeter, an inner side, an outer side, and a plurality of circumferentially

Art Unit: 3682

spaced teeth extending radially and outwardly from an outer periphery of the sprocket body (see Fig 3), wherein each tooth includes a tip and a base (see Fig 1); the sprocket body further having a noncircular shape with two long radius sides and two short radius side (see Fig 1), wherein the center includes at least three engaging recessions (see Fig 1); wherein the outer side (right side of S_6 , see Fig 3) of the body includes at least one recessed surface (12) and at least one raised surfaces (the teeth) and; wherein each raised surface extends from the tip of each tooth to below the base of the tooth and projects from at least a first perimeter segment of said outer side (see Figs 1 and 3) and wherein at least a second perimeter segment of said outer side is free of raised surface (space between teeth); and wherein the inner side of the body is free of raised surfaces (see Fig 3).

Re claim 3, wherein said at least one raised surface is located on a long radius side to the sprocket body (see Fig 3)

Re claim 5, the sprocket body has at least two raised surfaces, which are distributed evenly throughout the perimeter of the body (see Fig 1).

Re claim 6, a one piece spacer comprising: a boss part (unnumbered, see Figs 2 and 3); a ring part (flat unnumbered part adjacent S_1 , see Figs 2 and 3); wherein the ring part is placed on a circle concentric with, but larger in circumference than the boss part (see Figs 2 and 3); wherein the boss part includes an outer perimeter, an inner perimeter, a front face, and a back face; wherein the inner perimeter includes engaging channels and engaging protrusions, which extend in the axial direction (see Fig 1); and wherein the outer perimeter includes at least three projections (see Figs 2 and 3).

Art Unit: 3682

Re claim 7, a sprocket assembly comprising: A) at least two sprockets) axially and concentrically positioned relative to one another (see Fig 2); wherein each sprocket comprises: a sprocket body having a center, a perimeter, an inner side, an outer side, and a plurality of circumferentially spaced teeth extending radially and outwardly from an outer periphery of the sprocket body (see Fig 1), wherein each tooth includes a tip and a base (see Fig 1); said sprocket body having a non-circular shape with two long radius sides and two short radius sides (see Fig 1), wherein the center includes at least three engaging recessions (see Fig 1); wherein the outer side of the body includes a recessed surface (space between teeth) and at least one raised surfaces (teeth) and; wherein each raised surface extends from the tip of each tooth to below the base of the tooth and projects from at least a first perimeter segment of said outer side (right side of S_6 , see Fig 3) and wherein at least a second perimeter segment of said outer side is free of raised surface (space between teeth); wherein the inner side of the body is free of raised surfaces (left side of S_6 , see Fig 3) at least one spacer engaged with two sprockets, the spacer comprising: a boss part; a ring part; wherein the ring part is placed on a circle concentric with, but larger in circumference than the boss part (see Figs 2 and 3); wherein the boss part includes an outer perimeter, an inner perimeter, a front face, and a back face (see Figs 2 and 3); wherein the inner perimeter includes engaging channels and engaging protrusions which extend in the axial direction (see Figs 1-3); and wherein the outer perimeter includes at least three projections (see Figs 2 and 3).

Re claim 8, wherein only the boss part of the spacer enters the center of the sprocket, and wherein the projections slidably engage with the recessions of the sprocket (see Fig 3).

Re claim 9, wherein the projections move freely laterally inside the recessions of the sprocket (see Figs 2 and 3).

Re claim 10, wherein each sprocket independently moves inside the assembly (see Fig 3).

Re claim 11, wherein each sprocket moves laterally to meet with a chain link during the passing of a chain from one sprocket to the next sprocket (see Fig 3).

Re claim 12, wherein the inner side of the body of the sprocket faces the next smaller sprocket, and the outer side of the body faces the next larger sprocket (see Fig 3).

Re claim 13, wherein during the transfer of a chain from sprocket to sprocket, only the raised surfaces of the sprocket engages link plates of the chain (see Fig 3).

Re claim 14, the assembly includes an even size sprocket adjacent to an odd size sprocket (see Fig 1).

Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (571) 272-7106. The examiner can normally be reached on Monday-Friday (7:00a-3:30p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6217. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Vicky A. Johnson 8/10/07
Primary Examiner
Art Unit 3682